Walking with Giants

Deep in the Golden Land, Smithsonian Scientists Work to Save the Endangered Asian Elephant

By Christie Sampson

In the 1940s, Myanmar (then known as Burma) had an estimated 10,000 wild elephants roaming its tropical forests. But after decades of capturing elephants to use as labor in the timber industry and extensive habitat loss, forcing elephants and humans into closer proximity, the wild elephant population has plummeted to approximately 2,000 individuals. Dr. Peter Leimgruber and Dr. Melissa Songer of the Smithsonian Conservation Biology Institute have traveled into rural Myanmar to work with wildlife managers and local communities to devise a plan to combat the rising human-elephant conflict and find a way for both species, human and elephant, to share the remaining wilds of this golden land.

Leimgruber and Songer are working in collaboration with the Myanmar Ministry of Environmental Conservation and Forestry (MOECAF) and Clemson University on a multi-year plan to mitigate human-elephant conflict in an agricultural area outside of Yangon. In the summer of 2014, the Smithsonian research team met with local governments and residents, holding town hall meetings to hear community concerns regarding the local elephant population and to discuss the project proposals for the area. Researchers then conducted more than 300 interviews with residents in 34 villages to determine which issues (crop raiding, personal safety, etc.) most concerned the communities and local attitudes toward elephant conservation. These interviews also helped the team to determine the degree of human-elephant conflict in each village, the current methods residents used to avoid conflicts and their willingness to participate in the mitigation efforts.

In December 2014, Drs. Leimgruber and Songer returned to Myanmar with Dr. Suzan Murray, chief veterinarian at the Smithsonian’s National Zoo in Washington, D.C., and myself, a PhD student at Clemson University, to track and collar conflict elephants. Building upon similar studies conducted in Myanmar in the early 2000s, the team successfully captured four adult male elephants and fitted them with satellite GPS collars, which transmit the animals’ location to the research team once every hour. These data will allow researchers to monitor elephant movement before, during and after human-elephant conflict events and provide crucial information about the effectiveness of mitigation efforts as the study progresses. The Smithsonian research team will continue working with Dr. Zaw Min Oo of MOECAF and his staff to collar an additional 20 to 25 elephants over the next few years, expanding the area of the study as well as the diversity of elephants collared. They will also bring human-elephant conflict experts from Sri Lanka to consult on projects such as temporary electric fencing and work with award-winning Compass Films to produce human-elephant conflict education and outreach programs.

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